

Claims:

- ✓* *Sul C1* 5 1. An isolated polynucleotide molecule encoding a candidate effector protein for the Grb7 family of signalling proteins, wherein the polynucleotide molecule comprises a nucleotide sequence having at least 75% sequence identity to that shown as SEQ ID NO: 1.
- 10 2. A polynucleotide molecule according to claim 1, wherein the polynucleotide molecule comprises a nucleotide sequence having at least 85% sequence identity to that shown as SEQ ID NO: 1.
- 15 3. A polynucleotide molecule according to claim 1, wherein the polynucleotide molecule comprises a nucleotide sequence having at least 95% sequence identity to that shown as SEQ ID NO: 1.
4. A polynucleotide molecule according to claim 1, wherein the polynucleotide molecule comprises a nucleotide sequence which substantially corresponds to that shown as SEQ ID NO: 1.
- A* *Sul C2* 20 5. A host cell transformed with a polynucleotide molecule according to any one of the preceding claims. *1*
- 25 6. A host cell according to claim 5, wherein the host cell is a mammalian, insect, yeast or bacterial host cell.
- A* 7. A method of producing a protein, comprising culturing the host cell of claim 5 ~~or 6~~ under conditions suitable for the expression of the polynucleotide molecule and optionally recovering the protein.
- 30 8. A purified protein encoded by a polynucleotide molecule according to any one of claims 1 to 4.
- 35 9. A purified protein according to claim 8, wherein the protein comprises an amino acid sequence substantially corresponding to that shown as SEQ ID NO: 2.

- ✓ 10. A fusion protein comprising an amino acid sequence substantially corresponding to that shown as SEQ ID NO: 2.
- A 11. An antibody or fragment thereof which specifically binds to a protein according to claim 8 ~~or 9~~.
- A 12. An oligonucleotide probe comprising a nucleotide sequence of at least 12 nucleotides, the oligonucleotide probe comprising a nucleotide sequence such that the oligonucleotide probe selectively hybridises to the polynucleotide molecule of ~~any one of claims 1 to 4~~ under high stringency conditions.
13. An oligonucleotide probe according to claim 12, wherein the oligonucleotide probe comprises a nucleotide sequence of at least 18 nucleotides.
14. A method of detecting in a sample the presence of an effector protein for the Grb7 family of proteins, the method comprising reacting the sample with an antibody or fragment thereof according to claim 11.
- 20 15. A method of detecting in a sample the presence of mRNA encoding an effector protein for the Grb7 family of proteins, the method comprising reacting the sample with an oligonucleotide probe of claim 12 ~~or 13~~.

*Add C3*